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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,795	12/08/2005	Masakatsu Nitawaki	107348-00543	7495

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EXAMINER	
LUGO, CARLOS	

ART UNIT	PAPER NUMBER
3673	

NOTIFICATION DATE	DELIVERY MODE
08/05/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com
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Patent_Mail@arentfox.com

Office Action Summary	Application No.	Applicant(s)	
	10/559,795	NITAWAKI ET AL.	
	Examiner	Art Unit	
	CARLOS LUGO	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 May 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 July 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to applicant's amendment filed on May 24, 2010.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1 and 3-6 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 6,075,294 to Van den Boom et al (Van den Boom) in view of US Pat No 5,304,967 to Hayashi, US Pat Application Publication No 20030107473 to Pang et al (Pang) and US Pat No 6,740,834 to Sueyoshi et al (Sueyoshi '834).

Regarding claim 1, Van den Boom discloses a vehicle door outer handle system comprising an operating handle (13) comprising a handle main body made of a synthetic resin and a cover (29) made of a synthetic resin so as to cover the outer side of the handle main body (28).

The operating handle is disposed on an outer side of a vehicle door. A pair of electrodes (30); and a circuit board (34).

However, Van den Boom fails to positively disclose that the electrodes are patterned on the circuit board and that the circuit board is made of a single plate.

Pang teaches that it is well known in the art to provide a circuit board (36) with electrodes (11 and 12), wherein the circuit board is a single plate (figures 3 and 4).

Hayashi teaches that it is well known in the art to provide a circuit board (43) having electrodes (52-56) patterned on it (Col. 8 Lines 1-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the electrodes described by Van den Boom patterned on the circuit board, as taught by Pang and Hayashi, in order to organize all the circuit components in a single component.

Van den Boom also fails to disclose that the ground plate and the electrodes are covered by a covering portion made of a synthetic resin.

Sueyoshi '834 teaches that it is well known in the art to use a potting material (110) for covering certain electronic elements.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the plate and electrodes described by Van den Boom, encapsulated in a resin material, as taught by Sueyoshi '834, in order to provide protection to the members.

Van den Boom further fails to disclose that among opposite faces of the circuit board, a component of the detection circuit is mounted on the face on the side opposite to the face where the electrodes are patterned.

Sueyoshi '834 teaches that it is well known in the art to provide a pair of electrodes (104) on one side of a circuit board (109) and a detection member (34) mounted to the opposite side of the board.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device described by Van den Boom, with a

detection member, as taught by Sueyoshi '834, in order to detect the change in capacitance instead of generating an energy field as a detector.

As to claims 3/1 and 3/2, Van den Boom, as modified by Sueyoshi '834, illustrates that among opposite faces of the circuit board, the electrodes are capable of being patterned on the face on the vehicle side.

As to claim 4, Van den Boom illustrates that a sensor unit, which comprises the electrodes, the circuit board, and a covering portion made of a synthetic resin and covering the electrodes and the circuit board, is fixedly housed in a housing recess formed in the handle main body so as to open on the cover side.

As to claim 5, Van den Boom illustrates that the electrodes (30) and the circuit board (34) are mounted on a holder (surface of 28 in contact with the sensor unit), a majority of the holder is covered by the covering portion so as to form a part of the sensor unit.

As to claim 6, Van den Boom illustrates that a ground plate (36) forming a part of the sensor unit is mounted on the holder so as to cover the electrodes and is covered by the covering portion (29).

4. **Claims 7 an 8 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 6,075,294 to Van den Boom et al (Van den Boom) in view of US Pat No 5,304,967 to Hayashi and US Pat No 6,740,834 to Sueyoshi et al (Sueyoshi '834) as applied to claims 4 and 5, and further in view of US Pat No 6,769,154 to Klein et al (Klein).

Van den Boom, as modified by Hayashi and Sueyoshi '834, fails to disclose the holder is a separate member that is mounted on the handle main body. Van den Boom discloses that the handle main body acts as a holder.

Klein teaches that it is well known in the art to provide a holder (15) that holds electric components (16) inside a handle main body. As to the shape of the part that holds the holder in the main handle body, the shape is considered as a design consideration within the art that has no critically. The shape of this receiving part would be according to the holder specifications and/or shape that are best for fitting the holder in the handle main body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the handle main body described by Van den Boom, as modified by Hayashi and Sueyoshi '834, with a holder member, as taught by Klein, in order to hold in place the components inside the handle main body.

Response to Arguments

5. As to the double patenting rejection, the Office approves the terminal disclaimer filed on May 24, 2010. Therefore, the rejection has been withdrawn.

As to the previous 102(e) rejection, the arguments are persuasive and the rejection has been withdrawn.

As to the rejection in view of Van den Boom, as modified by Hayashi and Sueyoshi, the arguments are not persuasive. The applicant argues that Hayashi fails to disclose a circuit board formed of a single plate.

Although an argument could be made since the different plates described by Hayashi constitute a one member, a new grounds of rejection has been made on the record in view of Pang, which discloses a circuit board made of a single plate.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARLOS LUGO whose telephone number is (571)272-7058. The examiner can normally be reached on 10-7pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carlos Lugo/
Primary Examiner
Art Unit 3673

August 2, 2010.